

County Borough



of Blackburn

EDUCATION COMMITTEE

ANNUAL REPORT

for the year 1920.

BY

W. ALLEN DALEY,

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Medical Officer of Health and School Medical Officer.

BLACKBURN;
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* Elementary Education Sub-Committee.

† School Attendance Reference Sub-Committee.

STAFF.

Medical Officer of Health and School Medical Officer:

J. COOTE HIBBERT, M.D.(Lond.), D.P.H, (to 12th January, 1920).

W. ALLEN DALEY, M.D., B.S., B.Sc. (Lond.), B.A. (R.U.I.),
D.P.H. (Cambridge) (from 1st July, 1920).

Assistant School Medical Officer:

JAMES ROBERTSON, M.B., C.M.(Glasgow), D.P.H. (Royal Colleges
of Physicians and Surgeons, Edinburgh & Glasgow).

Ophthalmic Surgeon (part time) :

W. BARRIE BROWNIE, F.R.C.S.(Edin.), M.D.(Glasgow).

School Nurses:

MISS E. BARTON.

MISS G. EVANS (to 31st August, 1920).

MISS C. DWYER (from October 11th, 1920).

MISS D. V. GARDNER (from October 25th, 1920).

"WHAT WILL IT PROFIT A CHILD IF IT GAIN A WORLD OF KNOWLEDGE
AND LOSE ITS HEALTH?"

PUBLIC HEALTH DEPARTMENT,

TOWN HALL,

BLACKBURN,

April, 1921.

*To the Chairman and Members of the Education Committee
of the County Borough of Blackburn.*

LADIES AND GENTLEMEN,

I have the honour to present herewith my First Annual Report, being the 17th of the series, on the Medical Inspection and Treatment of School Children.

Dr. Coote Hibbert was School Medical Officer until January 12th, 1920, and I took over the duties of this office on the 1st July.

The routine inspections and the inspection clinics were conducted throughout the year by Dr. Robertson, Assistant School Medical Officer. The statistics relating to the Routine Inspections have been worked from Dr. Robertson's findings by Mr. Fowler, Chief Clerk; the statistics relating to Treatment were calculated by Mr. Pemberton.

It is impossible so soon after my appointment to present a critical review of the work of the School Medical Service in Blackburn, but following the suggestions of the Board of Education, I have dealt seriatim with the subjects concerning which they have requested information, though the particulars on some of the points are necessarily incomplete.

Developments of the work inaugurated before the end of the year were:—

(1) The institution of "cleanliness surveys" by the School Nurses: under this scheme every child will if possible be examined

for cleanliness by a School Nurse twice a year, and those found dirty will be re-examined at frequent intervals.

(2) The making of arrangements for cases of Adenoids and Enlarged Tonsils to be operated upon at the Blackburn and East Lancashire Royal Infirmary on a special day set apart for operations upon children recommended by this Education Authority.

(3) The commencement of the taking of a census of the physically defective: this is being completed now by Dr. Robertson.

(4) Increasing use of the Health Committee's Cleansing Station, particularly for the treatment of cases of Scabies where several members of a family were infected and disinfection of their bedding was necessary.

Various other schemes for improving the efficiency of the Service were in contemplation at the end of the year, and have since been put into operation, namely:—

(1) The appointment in conjunction with the Health Committee of a woman Doctor who will devote three Sessions per week to the work of the Education Committee and will *inter alia* examine the girls at the High School.

(2) Scholars of the High School and of the Queen Elizabeth's Grammar School are for the first time being examined. This is in accordance with an adoptive provision of the Education Act, 1918.

(3) A Dentist has been appointed and a Dental Clinic established. These arrangements are not so much for the extraction of teeth from children who suffer from toothache, but in order that there may be a systematic scheme for the conservation of the teeth of young children and so that serious dental decay and loss of teeth may be prevented.

(4) Owing to the large number of children with defective vision who were awaiting special examination and the prescription of spectacles, the services of the Ophthalmic Surgeon were engaged for two Sessions per week instead of one Session as from the 1st February, 1921.

(5) Arrangements are being made for the teachers to be supplied after each routine inspection with a list of their scholars who are physically defective so that they may co-operate with the School Medical Service in securing the necessary treatment.

(6) Owing to the congestion at the Clinic for Minor Ailments held at the Town Hall and owing to the fact that it is inconvenient of access from many parts of the town, the first subsidiary Clinic for the treatment of minor ailments has been established at 119, Bolton Road, which was formerly a Maternity and Child Welfare Centre.

(7) Arrangements have been made for children whose adenoids have been removed to receive a special course of breathing exercises by the Organiser of Physical Instruction. This is to be followed by the establishment of a Clinic for the treatment of Spinal Curvature and other deformities by Swedish Remedial Exercises.

The ultimate success of the School Medical Service being so largely dependent upon the goodwill and co-operation of the teachers, I am happy to find how loyally they carry out our suggestions, and I desire to state how much I appreciate their willingness at all times to support our efforts.

It is my pleasant duty to acknowledge my indebtedness to the Director of Education for the advice and assistance I have received from him on the many occasions upon which I have sought it, and to thank most warmly the Chairman and Members of the School Attendance Reference Sub-Committee for their unfailing support.

I am, Ladies and Gentlemen,

Your obedient Servant,

W. ALLEN DALEY,

School Medical Officer.

COUNTY BOROUGH OF BLACKBURN.

NUMBER OF SCHOOLS AND CHILDREN.

	Accom-	Mean No.	Average		
	Depart-	mod-	on	Attend-	
	No.	ments.	ation.	Rolls.	ance.
Council Schools	14	24	6,961	5,016	4,857
Non-provided Schools ...	32	76	19,087	14,624	11,393
	—	—	—	—	—
	46	100	26,048	19,640	16,250
	—	—	—	—	—

The High School including Crosshill Preparatory School contains some 487 scholars, and the Queen Elizabeth Grammar School 419.

The average number of children under five years of age in attendance at the Elementary Schools for the year ended 31st December, 1920, was 1,201.

Cost. I am indebted to the Borough Treasurer for the following :—

The rateable value of the Borough in 1920-1921 was £626,117.

The gross cost of Medical Inspection for the twelve months ended March 31st, 1920, was £1,302 11s. 7d., compared with £982 9s. 10d. in the preceding year; the Government grant was £651 5s. 9d.; hence the net cost was £651 5s. 10d.

The grant, as in previous years, was at the maximum rate of 50% of the expenditure.

The cost of the School Medical Service per child on the School rolls was 1s. 3.92d. gross and 7.96d. nett, and the cost as a decimal part of a penny rate was 0.597d. gross and 0.298d. nett.

ADMINISTRATION.

STAFF. The staff engaged in the work of the School Medical Service during 1920 comprised the School Medical Officer, who

devotes about 1/6th of his time to this branch of his work; the Assistant Schaal Medical Officer, Dr. Robertson, whose whole time practically is occupied in duties connected with the health of school children; a part-time Ophthalmic Surgeon who worked one session a week, and two whole-time School Nurses.

The duties of the Assistant School Medical Officer consist of the routine inspection of all school children (*a*) at their entrance to school, (*b*) at the age of 7 to 8 years, and (*c*) at the age of 12 years. He also examines in school special cases not in the groups for routine inspection who are selected by the teachers because they are ailing. The children who at previous inspections have been found to be suffering from a physical defect are seen by the Doctor at each of his visits to a school until the defect has been remedied. A further group examined in school consists of contacts of cases of Tuberculosis. This examination sometimes reveals the signs of early consumption in children at an age when comparatively simple treatment is efficacious.

Dr. Robertson also sees special cases at the Town Hall each Tuesday and Friday afternoon at 2 o'clock, and each Saturday at 10 a.m. These cases are referred by School Attendance Officers, School Nurses and Teachers. When it is remembered that the number of school sessions is but 400, that the number of routine inspections was 5,935, the number of re-examinations 4,859 and of special examinations 2,076, it will be understood why it was necessary to provide further medical assistance in order to comply with the requests of the Governors of the High School and of the Grammar School to examine their scholars. Early in 1921 a vacancy on the staff of Assistant Medical Officers was filled by the appointment of a lady Doctor who devotes some three sessions per week to work in the schools.

The services of the Ophthalmic Surgeon were paid for at a rate per patient, and about eight patients with defective vision were seen by him each Thursday morning. At the end of 1920, however, some 286 children were still awaiting examination and some had been on the waiting list for months. Commencing 1st February, 1921, the Ophthalmic Surgeon's services were engaged for two sessions per week, namely, each Monday and Thursday morning, payment being on a sessional basis. At the time of writing, the waiting list is assuming much smaller dimensions.

The work of the School Nurses consisted of (1) attendance at routine inspections at the schools with the Assistant Medical

Officer, (2) attendance at Inspection Clinics, Ophthalmic Clinics and Minor Ailment Clinic, the latter of which was held at the Town Hall each week-day at 9 a.m.; (3) examination of children in school for cleanliness and skin conditions, and (4) the following-up of dirty and physically defective children at their homes in order to impress on the parents the need for improvement in the case of dirty children, and for medical attention in the case of those with physical defects. Two Nurses could not possibly cope with a school population of almost 20,000, and with the inauguration of dental work and the development of the Treatment Clinics, two additional Nurses have lately been appointed.

The clerical work of the School Medical Service is performed in the Public Health Department by Mr. Pemberton under the supervision of Mr. Fowler, the Chief Clerk. It involves the maintenance of a card index containing an inspection card for each scholar. This work is complicated by the frequent removal of scholars from school to school. The cards are sorted into age groups so that the children for routine inspection in each year may be known. Further clerical work includes the sending of invitations to parents to attend the medical inspections, the writing of following-up cards for the children with defects, the tabulation of the statistics and the keeping of records of Clinic attendances. The clerical work will naturally increase with the growth of the number of inspections and clinics.

It has been arranged in order that the valuable co-operation of the teachers may be available that they are to be supplied after each routine inspection in future with a list of the scholars who are not physically sound. The nature of the defect will be pointed out and a note made of any special direction with regard to physical exercises or the need for medical advice.

PREMISES. The School Medical Service is somewhat handicapped by the lack of suitable premises in which to carry out the work, but as success is more dependent upon personnel than on where they work, the difficulties are being surmounted. The principal defects of the present accommodation are (1) insufficient waiting accommodation for the Inspection Clinics, (2) no suitable accommodation for those waiting to see the Ophthalmic Surgeon, (3) the Minor Ailments Treatment room at the Town Hall is insufficiently lighted.

Quite suitable accommodation for the School Dentist is being found in the upper floor of the Town Hall, access to which is

gained by a lift with an attendant always there. The Swedish Remedial Exercises Clinic is being temporarily accommodated in a room adjoining the Dental Clinic.

The growth of the number of cases requiring treatment for Minor Ailments, and the inaccessibility of the Town Hall to some distant schools, was recognised, and a subsidiary Minor Ailments Treatment Centre has been established at 119, Bolton Road; premises formerly used as a Maternity and Child Welfare Centre. This Clinic is open at 4-15 p.m. each week-day except Saturday, when it is open at 9 a.m.

RECORD CARDS. Inspection Cards, on the Board of Education's model, are kept at the Town Hall, and an endeavour is being made to record on those cards all important particulars relating to the health of the children concerned, all attendances at the Inspection Clinic being marked thereon.

CO-ORDINATION WITH OTHER MEDICAL SERVICES.

There is effective co-ordination between the work of the School Medical Service and that of the general Public Health Service of the town, though it has not been found possible as yet to amalgamate the School Nursing and Health Visiting staffs.

As it is well known that untreated defects, for example, squint or adenoids, tend to become worse, it has now been arranged that children below school age who are discovered to have defects at the Maternity and Child Welfare Centres, may be treated at the Education Committee's Clinics, if their parents are unable to obtain private medical attention.

All cases of acute infectious diseases in school children are visited by the Health Department's staff.

SCHOOL HYGIENE.

An exhaustive Report upon the sanitary condition of the Public Elementary Schools of Blackburn was issued by my predecessor, Dr. Alfred Greenwood, in 1904. It contains plans of all the schools then in use, and the letter-press occupies 420 pages. Certain improvements have been effected since then, and I shall endeavour, if possible, during 1921, to bring the volume up to date and include in my Report for next year the information required under this heading by the Board of Education.

Medical Inspection.

The following Table gives the number of examinations performed :—

Number of Children inspected 1st January, 1920, to 31st December, 1920.

TABLE I.

AGE.	ENTRANTS.					TOTAL.
	3	4	5	6	Other ages.	
Boys ...	23	160	540	204	110	1037
Girls ...	17	131	588	246	123	1105
Totals ...	40	291	1128	450	233	2142

AGE.	Intermediate Group.	LEAVERS.				Grand Total.
		8	12	13	14	
Boys	810	1098	27	2	...	1937
Girls	831	995	28	2	...	1856
Totals	1641	2093	55	4	...	5935

AGE.	SPECIAL INSPECTIONS.	
	Special Cases.	Re-examinations (i.e. No. of Children re-examined).
Boys	955	2362
Girls	1121	2497
Total ...	2076	4859

The total number of children inspected by the Medical Officer, whether as routine or special cases was 8,011.

Routine inspections are those of children selected solely because they have attained a certain age. Those temporarily absent on the day of the inspection are examined at the next visit of the doctor to the school.

WORK OF PAST YEARS. The following table shows the total number of examinations since the inauguration of the work :—

Year	Routine Inspections	Special Examinations	Re-Examinations	Totals
1908	2118	654	...	2772
1909	4581	485	...	5066
1910	7606	385	...	7991
1911	9064	527	1874	11465
1912	4972	583	2403	7958
1913	4763	1630	2227	8620
1914	5056	883	949	6888
1915	4968	1523	1789	8280
1916	4922	1107	2447	8476
1917	6240	2339	2061	10340
1918	3053	1656	1588	6297
1919	7138	1679	1957	10774
1920	5935	2076	4859	12870
	70416	15227	22154	107797

ACCOMMODATION FOR THE ROUTINE INSPECTIONS. At the time when most of the Blackburn schools were built, medical inspection was undreamt of, and the result is that it is in very few schools that the room in which the examinations are conducted is suitable for this purpose. A medical inspection room should be well heated, adequately lighted, and as free from noise as possible. There should be provision for parents who are waiting, and for the vision and hearing of the children to be tested, in a room 20 feet long. In 33 schools out of the 54, including Special Schools and Classes and Secondary Schools, in which examinations take

place, the heating of the inspection room is inadequate. In one school there are neither hot-water pipes nor a fireplace in the inspection room, and the inspections therefore have to be arranged for the summer. In eleven schools the doctor conducts the inspection in a cloak-room; and in one, on the stair landing.

FINDINGS OF MEDICAL INSPECTION. The following Table shows the number of defects found in children submitted for routine or special examination during the year:—

TABLE II.

Return of Defects found in the course of Medical Inspection
in 1920.

Defect or Disease.	Routine Inspections.		Specials.	
	Number referred for treatment.	Number to be kept under observation but not referred for treatment.	Treatment.	Observation only.
Number examined	5935	...	2076	
<i>Malnutrition.</i>	6	...	...	...
<i>Uncleanliness.</i>				
Head	210	...	182	...
Body	28	...	43	...
<i>Skin.</i>				
Ringworm.				
Head	13	...	126	...
Body	5	...	34	...
Scabies	36	...	265	...
Impetigo	26	...	429	...
Other Diseases (non-tubercular)	3	...	154	1
<i>Eye.</i>				
Blepharitis	27	2	10	1
Conjunctivitis	2	1	12	...
Keratitis .....	...	...	...	..
Corneal Ulcer	2	...	...	..
Corneal Opacities .....	...	...	...	...
Defective Vision	317	83	70	23
Squint	33	8	8	4
Other Conditions	1	4	2	1
<i>Ear.</i>				
Defective Hearing	2	2	1	1
Otitis Media	12	4	18	1
Other Ear Diseases	8	1	...	...
<i>Nose and Throat.</i>				
Enlarged Tonsils	46	6	4	...
Adenoids	2	...	...	...
Enlarged Tonsils and Adenoids	22	1	1	...
Other Conditions	2	2	...	...

TABLE II.—Continued.

Defect or Disease.	Routine Inspections.		Specials.	
	Number referred for treatment.	Number to be kept under observation but not referred for treatment.	Treatment.	Observation only.
<i>Enlarged Cervical Glands</i>				
Non-tubercular .....	...	...	1	...
<i>Defective Speech</i> .....	...	...	...	...
<i>Teeth</i>	224	...	7	...
<i>Heart and Circulation.</i>				
Heart Disease				
Organic	14	4	...	1
Functional	1	14	...	...
Anæmia	25	3	6	...
<i>Lungs.</i>				
Bronchitis	18	10	...	...
Other Non-tubercular Diseases .....	...	4	...	...
<i>Tuberculosis.</i>				
(Pulmonary).				
Definite	3	...	...	...
Suspected .....	...	3	...	...
(Non-Pulmonary.)				
Glands	2	4	...	...
Spine .....	...	...	...	...
Hip .....	...	...	...	...
Other Bones & Joints	...	...	...	...
Skin .....	...	...	...	...
Other Forms	2	3	...	...
<i>Nervous System.</i>				
Epilepsy .....	...	2	...	1
Chorea	2	...	1	...
Other Conditions .....	...	...	...	...
<i>Deformities.</i>				
Rickets	1	...	1	...
Spinal Curvature	2	1	...	...
Other Forms .....	...	4	...	...
<i>Other Defects & Diseases</i>	17	14	34	7

Number of individual children having defects which required treatment or to be kept under observation 2422

It will be seen from Tables I. and II. that of the 8,011 children examined, 2,422, or 30 per cent., suffered from a defect which required either treatment or to be kept under observation. The next Table (VI.) refers only to children examined at Routine In-

spection, that is, children not selected because of any ailment and solely because they happened to be of the ages for Routine Inspection, namely, at entrance to school, at age eight and at age twelve years.

TABLE VI.

Summary relating to children medically inspected at routine inspections during the year 1920.

	No.	Per Cent.
1. Total number of children medically inspected at routine inspections	5935	
2. Number of children in (1) suffering from—		
Malnutrition	14	0.2
Skin disease	80	1.3
Defective vision (including squint).		
Vision 6/12ths or worse in either eye	828	13.9
Eye disease	64	1.0
Defective hearing	47	0.8
Ear disease	26	0.4
Nose and Throat disease	357	6.0
Enlarged Glands of Neck (non-tubercular)	1119	18.8
Defective speech	20	0.3
Dental disease (four or more teeth carious)	522	8.8
Heart disease—		
Organic	19	0.3
Functional	17	0.2
Anæmia	36	0.6
Lung disease (non-tubercular)	61	1.0
Tuberculosis—		
Pulmonary—Definite	3	0.05
,, Suspected	5	0.08
Non-pulmonary	18	0.3
Diseases of the Nervous System ...	11	0.2
Deformities	33	0.5
Other defects and diseases	244	4.1
3. Number of children suffering from defects requiring to be kept under observation	180	3.0
4. Number of children referred for treatment	863	14.5
5. Number treated of those recommended for treatment	319	37.0

It should be noted that certain groups of defect, for example, defective vision as examined by test types, or the number of decayed teeth, are capable of exact record, but with regard to other defects, for example, malnutrition, enlarged glands of neck, or anaemia, the personal equation of the examiner must be reckoned with, for the standard of different doctors must necessarily vary. It was found that of 2,854 boys examined, only 555, or 19 per cent., had no physical defect recorded upon their inspection cards. It must not, however, be concluded from this that the condition of Blackburn children is alarmingly bad; similar results are found in other towns. The majority of the defects are readily remediable, and if remedied now, there is no reason why the children should not grow up with unimpaired health, though permanent and serious disability will result in many cases if no treatment is obtained. Of the 2,860 girls examined, the number without an adverse mark was 583, or 20.4 per cent.

It should be noted that 863 children, or 14.5 per cent., were suffering from a defect which required immediate treatment.

The following give further particulars of the conditions found at the inspections :—

CLOTHING AND FOOTWEAR. Of the 5,935 children seen by the Assistant School Medical Officer at the routine inspections, in only eleven was it necessary to describe the clothing as "dirty," and in another eleven as "bad." The footwear was bad, however, in 32 boys and 6 girls. About 80 per cent. of the children wore clogs.

HEIGHT, WEIGHT, AND NUTRITION. Owing to the fact that only two or three of the schools possess a weighing-machine, the heights and weights of the scholars have not been recorded since 1917, when a weighing-machine was transported from school to school. Under these circumstances, accurate weighing was impossible. This most valuable index as to the physique of the children is not available. Steps are now being taken, however, to rectify this deficiency, and some of the schools are being supplied this year with a weighing-machine and a height recorder. The Assistant School Medical Officer regarded the nutrition of 3.8 per cent. of the boys and 5.4 per cent. of the girls as excellent; 82.9 per cent. of the boys and 81.4 per cent. of the girls were well nourished, 13 per cent. of each sex were of "medium" nutrition, and in only ten boys and four girls was the nutrition described as "bad."

CLEANLINESS. The routine inspections record that the heads of four boys and 404 girls were infested with nits, and that in the case of one boy and three girls, vermin were seen in their hair. The bodies of 120 boys and 85 girls were "somewhat" dirty; 15 boys and 5 girls were "dirty"; and 70 boys and 88 girls "very dirty." Body lice were seen on five girls.

Unfortunately these figures, which relate to children specially prepared for the doctor's visit, do not reveal the ordinary condition of children as regards cleanliness. The School Nurses are now engaged in a campaign against uncleanliness, the main features of which are that every child is to be examined at least twice a year. At the first visit in each series, all the children present are to be inspected and the names of those who are dirty entered in a book, the entries opposite the names indicating whether the child has nits, numerous nits, very numerous nits, or whether vermin were actually seen. The School Nurses arrange with the Head Teachers suitable times at which the examinations are to take place, and whenever possible, the children are examined privately, so that other children may not know the result of the examination. If the child is so bad that exclusion from school is necessary, the home is visited by the School Nurse at once, and if it is obvious from the condition of the house and the absence of proper facilities for cleansing, that they should be given a good start at the Cleansing Station, Throstle Street, this is arranged, and disinfection of the beds and clothing of all members of the family is offered. If cleansing at the Station is carried out, the parents are warned that if there is any relapse, prosecution will be considered.

If a child is dirty or has nits in the hair, but is not bad enough to be excluded from school, the child is given, in a sealed envelope, a note to its parents, in which attention is drawn to the condition, and a hope expressed that it will be rectified. About a week later, the school is visited again. All those found dirty at the first examination are re-examined, and those who were absent at the time of the first inspection are examined. The names of those who are now clean are removed from the list; a further form giving instructions as to how the head can best be cleaned is sent to the parents of the children still verminous. Similarly third and fourth examinations, after reasonable intervals, take place in school; but after the fourth examination, if the condition is still unrectified, the home is visited and the necessary pressure brought to bear upon the

parents. In a few special cases, excluded children have been cleansed by the Nurses at the Minor Ailments Treatment Centre. A special comb is used which, in conjunction with an appropriate shampoo, will suffice to clean a moderately dirty head in a little over an hour.

The work done under this scheme during the first six months of its operation is as under :—

	Number Examined.	Number Clean	%	Nits Present	No.	%	Nits Numerous	No.	%
Boys	4847	4124	85.1	469	9.7	94	1.9		
Girls	5541	2392	42.8	1416	25.5	960	17.3		
				Nits very Numerous	No.	%	Vermin Seen	No.	%
Boys		84	1.7		76	1.6			
Girls		625	11.3		168	3.0			

It was necessary, as a result of these examinations, to exclude from school, until they were cleaner, 73 boys and 102 girls.

The re-examinations indicated a considerable improvement. It should be noted that these conditions are no worse than in other towns where there has not been a special campaign against uncleanliness by the School Nurses.

The co-operation of the teachers in these efforts to improve the cleanliness of the children has been invaluable. Fortunately it is now recognised by all that it is very unfair to require clean children to attend school compulsorily if we do not use all the means at our disposal to protect them from infection with vermin.

The following Table gives the information required by the Board of Education :—

TABLE IV. E.

- (a) The average number of visits per annum paid by the School Nurses to each school 5
- (b) The total number of examinations of children by the School Nurses during the year in the schools ... 12399
- (c) The number of individual children excluded by the School Nurses because of uncleanliness ,.....,..... 117

- (d) The arrangements made by the Authority for cleansing and the number of children cleansed under these arrangements : The Health Committee have equipped an efficient Cleansing Station in Throstle Street; no use was made of it until October, 1920 : since then three school children have been cleansed there.
- (e) There were no legal proceedings with regard to uncleanliness taken under either the Children's Act, 1908, or the School Attendance Byelaws.

NOSE AND THROAT. At the routine inspections 25 cases of adenoids were reported. This is a condition where, apart from manual examination or examination with a post-nasal mirror, a certain diagnosis is difficult, and in school work the presence of these growths has to be deduced by their results, such as persistent mouth-breathing, deformed nose, or discharging ears.

The importance of healthy breathing through the nose as a preventative of adenoids is being slowly recognised ; a leaflet on this subject was drawn up during the year and is being distributed. The need for training young children in the proper use of a hand-kerchief is often not recognised sufficiently. Until taught how to use it, children generally sniff up the nose instead of blowing down, thus leading to its occlusion and the growth of adenoids in the space at the back of the nose.

In 5.5% of the boys and 6.8% of the girls the tonsils were enlarged.

SKIN DISEASES. The routine inspections revealed the presence of 13 cases of ringworm of the scalp, a most intractable disease which often causes sufferers to be absent from school for months, and five of ringworm of the body. There were 36 cases of Scabies ("the itch") and 26 of Impetigo, a contagious skin disease consisting of sores covered with yellowish crusts. At the special inspections, large numbers of unsatisfactory skin conditions were found, namely, 126 Ringworm of the Scalp, 34 Ringworm of the Body, 265 Scabies, and 429 Impetigo. There were 154 cases of other skin diseases, mostly Eczema, amongst the special cases.

ENLARGED GLANDS IN NECK. No fewer than 19.4% of the scholars at Routine Inspection were noted to have enlarged glands in the neck, but in only 28 boys and 45 girls was the enlargement

obvious to the eye. As the cleanliness of the heads and the condition of the teeth and throat improve, the number of these cases should be reduced.

EXTERNAL EYE DISEASE. Fifty cases of inflammation of the eyelids (Blepharitis) were noted at Routine Inspections. There were 34 squinting boys and 40 squinting girls. It is most important that all cases of squint should receive medical attention and have the necessary spectacles prescribed as, if this is not done, the vision in the squinting eye gradually disappears.

VISION. The vision of each eye of the "intermediates" and "leavers" was tested by Snellen's type. Only 9.7% of the boys and 9% of the girls had normal vision (6/6 on Snellen's scale) in each eye. A further 51.9% boys and 49.4% girls had in their better eye either normal vision (6/6) or slightly defective vision only (6/9 on Snellen's scale, which means that a person six metres from the test type can only see what a normal person should see at nine metres). Three hundred and forty-seven boys and 350 girls (being 12.1% and 12.2% of those examined) had in their worse eye vision of 6/12 or 6/24 only (that is at six metres they could only see what they should have been able to see at 12 or 24 metres distance). Seventy boys and 61 girls had seriously defective vision (6/36 or worse in one or both eyes). Amongst so many cases of defective vision, only 42 boys and 69 girls were at the time of the inspection wearing suitable spectacles. A child with uncorrected defective vision is handicapped both physically and educationally, and it is hoped that in future not only will all such cases receive a medical prescription for suitable glasses, but that the parents will obtain the spectacles and make the children wear them. I would suggest the advisability of placing in each class or schoolroom a list of the children for whom glasses have been prescribed, so that failure on the part of a scholar to wear the glasses may be promptly noted. The teachers will in future be supplied by means of the "clinic cards" with particulars of children who obtain prescriptions for glasses at the Ophthalmic Clinic.

EAR DISEASE AND HEARING. Twenty-six cases of middle ear disease causing discharge from one or both ears were seen at Routine Inspections. Forty-seven children were recorded to have defective hearing, but this probably does not represent the total number of children whose hearing was not up to the standard.

The "forced whisper" or "watch tests" were not used owing to the fact that in most schools there is considerable noise in the vicinity of the examination room. Those noted to be suffering from defective hearing were detected because of their inability to hear the examiner's remarks to them.

DENTAL DEFECT. Five hundred and twenty-two children, or 8.8% of those examined, were noted by the Assistant Medical Officer to have four or more decayed teeth. This, however, represented only the gross cases of unhealthy mouths. The examination of the teeth by the School Dentist with a probe and mirror showed in the first 385 children aged seven years examined in Blackburn schools in 1921 only 10.4% with all their teeth sound : 55.5% had five or more temporary teeth decayed, whilst in no fewer than 24.6% of these seven-year-old children there was decay in one or more of their newly erupted permanent teeth. The dental condition of the older children is, of course, much more unsatisfactory, as the number of decayed permanent teeth naturally increases with age.

TUBERCULOSIS. At the Routine Inspections three cases of definite and five of suspected Tuberculosis of the lungs were found ; there were 13 cases of Tuberculosis of the glands in the neck, 3 of Tuberculosis of the Eye and 2 cases of Abdominal Tuberculosis. Altogether 11 cases of Tuberculosis not previously notified to the Medical Officer of Health were discovered as a result of the Routine or Special Examination of School Children. All children attending school who had at any time been notified to the Medical Officer of Health as suffering from Tuberculosis were specially examined, as in previous years, by the Assistant School Medical Officer. Sixty-nine children were thus examined and instructions given as to their further attendance at school. It is known that there are in the town 51 children of school age who are suffering from Tuberculosis of the Lungs. At the end of 1920, 28 were attending Public Elementary Schools, 18 were in Residential Institutions (the majority in the Poor Law Institution) and 5 others were unfit to attend school. There are 51 children suffering from Tuberculosis of organs other than the lungs, generally the glands in the neck, in attendance at ordinary schools and six are in Residential Institutions.

TUBERCULOSIS CONTACTS. Children who have lived in the same house as cases of Tuberculosis were also examined at school,

as in previous years. Four hundred and eighty-five "contacts" were thus specially examined, three cases of the disease being found amongst these children.

HEART DISEASE. Fourteen girls and 4 boys were discovered at Routine Inspections to be suffering from Valvular Disease of the Heart. It is not sufficiently realised that rheumatism is the great cause of heart disease in children, and that the rheumatism which is causing life-long damage to the heart may have as its sole manifestation pains in the legs which are regarded as trivial "growing pains." Every child suffering from "growing pains" should be under constant medical supervision.

Twenty-one boys and 15 girls were noted to be anaemic.

DEFORMITIES. The deplorable prevalence of Rickets in Blackburn children of a former generation (which is obvious to the medical observer as he walks the streets of the town) should be reduced as a result of the work of the Child Welfare Centres where advice is given on the hygiene of child life. It is now known that rickets is largely due to unsuitable diet and unsatisfactory surroundings. The development of rickets is associated with the absence from the diet of a substance which is found in animal fats: for example, mothers' milk, cows' milk, butter, bacon, oleo-margarine, and bacon fat, but not in vegetable fats of which ordinary margarine is composed. Rickety deformities were noted at Routine Inspection in 132 boys and 80 girls, and there were 32 children found to be suffering from other deformities, mostly Spinal Curvature.

CENSUS OF THE PHYSICALLY DEFECTIVE. At the end of the year an endeavour was made to take a census of physically defective children; under the term "physically defective" is included not only the crippled and maimed, but also those suffering from serious heart disease. Information with regard to cases aged from 5 to 16 years was obtained from School Attendance Officers, Teachers, School Nurses, Infant Welfare Visitors and the Society for the Care of Cripples. Altogether 106 children, including seven heart cases, have been examined either at home or at the Town Hall by the Assistant School Medical Officer. Table VII. gives his summary of the results of the examinations. (See Page 26.)

Particulars of 99 non-cardiac cases are included in the Table. In 17 crippling is due to tuberculosis of the bones or joints; in 5 the disease is still active, including two children aged 15 years with tuberculous spines who were working, one as a Christmas-card maker and the other on an electric sewing machine. Eight attend

ordinary schools and one an Open-Air Class; one child in a spinal carriage is unfit for any school. Another child, a girl aged 16, attends an ordinary school in her spinal carriage. Five other children now out of school would be suitable for education in a day school for the physically defective. In three of these tuberculous cases satisfactory medical treatment had not been obtained, and when one considers the difficulties which beset poor mothers who are endeavouring to obtain treatment for these crippled children, it is a matter for surprise that so much has been done. It is not uncommon for mothers to have to carry the children at regular and fairly frequent intervals to the Infirmary or even take them to Liverpool or Manchester. The apparatus is costly and requires renewal from time to time. In tuberculous cases unpleasant surgical dressings may have to be done: the child in splints or on a carriage can do nothing to help himself and withal the mother has the care of her home and the other members of her family.

The largest group of cripples is that caused by Infantile Paralysis: the number is 28, and in all cases save one the leg is involved. Six are unable to walk at all when their splints are removed and eight walk only with difficulty. Despite this handicap, 22 manage to attend an ordinary school including one boy who has to be carried there.

The next group consists of 8 cases of birth palsy, including one child who is bedfast and four who are mentally defective. One is suitable for education in a day special school, but the other three are ineducable.

The 9 cases of congenital deformity include two cases of congenital dislocation of the hip, one of whom has had little or no treatment, and 5 of club feet.

Ten children are crippled because of accidents: 8 attend an ordinary school, one is working, and the other is unfit at present for any school.

The last group consists of cripples who are maimed by that eminently preventable disease, rickets, which ought not to exist in a civilised community. The children have been operated upon when necessary, and except for disfigurement and deformity the boys may not suffer further from their parents' ignorance of how to bring them up. Unfortunately the girls are in a much worse position, as no medical or surgical procedure can make a ricketty pelvis normal, and at the time of child-birth fatalities are liable to occur.

TABLE VII. Census of the Physically Defective.

	Location	Treatment	Present Condition	Surgical Appliances		Education	Working
				Spine	Hip		
1. Tuberculosis	Good	0	1	...	2
2. Paralysis:			Poor	1	2	...	1
(a) Infantile	...	28	Impaired use of Arm and Leg	3	4	...	2
(b) Cerebral	...	8	Impaired use of Arm and Leg	3	4	...	4
3. Congenital Deformities	...	9	Ankylosis of Joints	1	1	...	1
		9	Crutch	2	2	...	2
		1	Splint	3	4	...	3
		1	Jacket	1	1	...	1
		1	Artificial Limb	2	4	...	5
		1	Boot required	2	4	...	5
		1	Not fit for Mentally Def. School	22	4	...	25
		1	Totaly unfit	3	1	...	1
		1	Not fit for School at present	5	5	...	5
		1	At School	9	5	...	9
		1	Suitable for Crippled School	5	5	...	5
		1	Not fit for School	5	5	...	5
		1	Working	5	5	...	5
		1	Education	5	5	...	5

The summary of the table shows that 6 of the 99 crippled children limp, 18 walk with difficulty, 12 are unable to walk, 4 use a crutch, 5 a special boot, 22 wear splints, 5 a spinal jacket, and 2 are in spinal carriages. It is a tribute to the work of voluntary agencies that not a single child is in need of a splint, special boot or spinal carriage. No less than 72 attend an ordinary school, many of them under very grave difficulties, and they ought to be in a school where special facilities exist for their education.

Nine are not receiving any education and will not be able to do so until a school for physically defectives and facilities for getting them there are available.

In addition there are a number of serious heart cases, a defect to which Blackburn children are particularly prone, for whom education in a special school is necessary.

INFECTIOUS DISEASES.

The following Table shows the total number of cases of the infectious diseases mentioned which were notified or reported in the Borough and the number of those which occurred amongst school children. As Measles, Whooping-cough, Chickenpox and Mumps are not compulsorily notifiable, the total number of cases is not known. Information as to these diseases is obtained from the Teachers, Health Visitors and School Attendance Officers.

Disease.	Number notified or reported in the whole Borough.	Number occurring amongst School-children.
Scarlet Fever	182	128
Diphtheria	69	43
Enteric Fever	5	—
Measles	1446	1435
Whooping-cough	17	14
Chicken Pox	244	239
Mumps	57	57

There were small outbreaks of Scarlet Fever at Christ Church and Park Road Schools, but they were quickly controlled. The Diphtheria cases were more numerous than during 1919, but for a town of the size of Blackburn the incidence is small. No school had an excessive prevalence, the 43 cases being distributed amongst 21 schools. There was a sharp outbreak of Measles during the first six months of the year and the following closures were necessary :—

SCHOOLS CLOSED FOR MEASLES DURING 1920.

<i>School.</i>	<i>Period.</i>
St. Silas' Infants	January 29th to Feb. 14th (inclusive).
Park Road Infants	March 4th to March 19th.
St. Bartholomew's Infants	March 6th to March 21st.
Wensley Fold Infants	March 20th to April 4th.
St. Andrew's Infants	March 25th to April 9th.
St. Peter's C.E. Infants	March 25th to April 9th.
Accrington Road Infants	March 26th to April 10th.
Witton Infants	May 8th to May 24th.
Bank Top Infants	May 8th to May 24th.
Emmanuel Infants	May 12th to May 28th.
Holy Trinity Infants	May 12th to May 28th.
St. Michael's Infants	May 12th to May 28th.
Audley Range Infants	May 13th to May 29th.
St. Joseph's R.C. Infants	May 15th to May 30th.
Mill Hill C. Infants	May 15th to May 30th.
Bangor Street Infants	June 5th to June 20th.
St. Mary's R.C. Infants	June 10th to June 25th.
St. Barnabas' Infants	June 10th to June 25th.
Mill Hill C.E. Infants	June 10th to June 25th.
Cedar Street Infants	June 30th to July 15th.

Owing to an outbreak of Influenza it was necessary to close St. Alban's R.C. School from March 26th until the end of the Easter holidays (April 12th).

FOLLOWING UP.

The parents of children with serious defects discovered at routine or special inspections at the schools are visited the same day by a School Nurse. If the defect is less urgent, a note is despatched from the school to the parents stating the nature of the disability and the need for treatment: in cases where treatment is available at a Clinic this is stated on the form, and the parents are

also informed that any further information with regard to the child may be obtained at the Inspection Clinic which is held at the Town Hall each Tuesday and Friday afternoon. A special "following up" card is prepared for all children requiring medical treatment or who should be kept under observation and such children are examined in school by the School Medical Officer at every subsequent visit until the defect is cured or further observation is unnecessary. At these re-examinations the Doctor gives instructions to the School Nurses as to the need for home visits. During the year the Nurses paid 2,858 visits to homes.

MEDICAL TREATMENT.

MINOR AILMENTS. The following Table gives particulars of the cases of Minor Ailment dealt with during the year:—

Table IV A. TREATMENT OF MINOR AILMENTS.

Disease or Defect.	Referred for Treatment.	Number of Children.		
		Treated.		
		Under Local Education Authority's Scheme.	Otherwise	TOTAL.
SKIN—				
Ringworm — Head	139	36	85	121
Ringworm — Body.....	39	6	28	34
Scabies	301	13	241	254
Impetigo	455	42	357	399
Minor Injuries	2	2	--	2
Other Skin Disease	155	24	122	146
Ear Disease	41	11	1	12
Eye Disease (external and other)	54	4	17	21
Miscellaneous	227	19	208	227
TOTAL.....	1413	157	1059	1216

The Local Education Authority's Centre for the treatment of these conditions was held at the Town Hall at 9 a.m. each weekday. The following Table shows that 136 cases were dealt with during the year :—

TOWN HALL TREATMENT CLINIC.

Disease.	Brought Forward from 1919.	No. of New Cases.	No. of Attendances.	No. of days between 1st treatment & Cure.	Av. days treatment before fit for School.	Still attending at end of Year.
Ringworm—Head	9	36	513	995	27·6	8
Ringworm—Body	—	6	32	51	8·5	—
Impetigo	1	42	284	468	11·1	1
Blepharitis	—	2	6	6	3·0	1
Ophthalmia	—	2	23	66	33·0	—
Ear Discharge	—	1	6	6	6·0	—
Wax in Ears.....	—	10	15	—	—	—
S borrhœa	—	4	19	22	5·5	—
Favus.....	—	1	6	7	7·0	—
Sores—Head (Vermin)	1	19	106	178	9·3	1
Minor Injury	—	2	2	2	1·0	—
Total.....	11	125	1012			11

At the time of writing the average daily attendance at the Town Hall Clinic is 17, and at the subsidiary clinic at 119, Bolton Road, 14.

The foregoing Table gives details of the periods of exclusion from school of children attending the Clinic : by way of comparison the following Table shows the periods of exclusion required for all cases of the diseases mentioned and incidentally is a testimony to the value of the Clinic in improving school attendance. It will be noted that while the average period of exclusion for all cases of Ringworm of the Scalp was 58 days, for the 45 treated at the Clinic it was 27 only ; for all Impetigo cases it was 22 days, and for Clinic cases only 11 days.

LOSS OF SCHOOL ATTENDANCES

THROUGH EXCLUSION OF CHILDREN SUFFERING FROM MINOR AILMENTS
(chiefly contagious).

The following Table shows, for the year 1920, the number of school-children suffering from Minor Ailments requiring exclusion from school and the number of days (including Saturdays, Sundays and School holidays) those children were excluded during the year :—

Disease.	No. of Cases brought forward from 1919.	No. of Children affected.	No. of days excluded.	No. of Cases on books at end of Year.
Ringworm—Head	21	121	7069	16
Ringworm—Body	3	34	1054	—
Scabies	44	254	15373	10
Impetigo	21	399	9100	31
Verminous Conditions ..	2	183	1437	13
Ear Discharge	—	2	19	—
Eye Diseases	7	21	1428	2
Other Skin Diseases	—	141	2708	4
Miscellaneous	3	44	1028	—
Total.....	101	1199	39216	76

The average period of exclusion for each disease as regards children who were re-admitted to school during 1920 is shown below.

Average period
of exclusion.

Ringworm—Head	58.8 days.
Ringworm—Body	31.0 „
Scabies	60.5 „
Impetigo	22.7 „
Verminous Conditions	7.8 „
Eye Diseases	68.0 „
Other Skin Diseases	19.2 „

The use of these Clinics is not confined now to children excluded from school, but if the lesion is such that school attendance is possible, the child attends the Clinic on the way to or from school.

During the latter part of the year, use was made of the Cleansing Station for the treatment of cases of Scabies : altogether 13 cases were dealt with, and the average period of exclusion from the first cleansing until they were fit for school was 23.4 days. They were all serious cases, and the average period of exclusion before attendance at the Cleansing Station had been 26.8 days, during which time home remedies had been tried.

The average period of exclusion in all cases of Scabies was 60.5 days; hence if treatment at the Cleansing Station were promptly applied to every case, the loss of school attendance would be reduced by over 47 days. In the cases of Scabies dealt with at the Cleansing Station, all members of the family who were suffering from the disease were also treated.

VISUAL DEFECT. The following Table (see Page 33) shows that of 539 children with defective vision referred for treatment, only 253, or less than half, were examined with a view to the prescription of spectacles, and in 42 of these cases the glasses were not prescribed by a medical man : 194 children were seen by the Education Authority's Ophthalmic Surgeon, Dr. Barrie Brownlie, who attended on Thursday mornings and saw the cases in an improvised Ophthalmic Clinic in the basement of the Town Hall. The Clinic was not open until the end of February, and there were 31 sessions altogether. Under the new arrangements outlined on page 10, the arrears of work are now being slowly overtaken. When a prescription for glasses has been issued, the case is referred to the Director of Education, and a School Attendance Officer visits the home until the glasses have been obtained ; assistance is given in necessitous cases towards the cost of purchasing the glasses.

In order to facilitate the work of the Clinic, leaflets were prepared during the year on (1) The proper care and use of spectacles ; (2) Seriously defective eyes ; and (3) Squinting eyes.

It has been arranged that serious cases of external eye disease will in future be seen at the Ophthalmic Clinic by Dr. Brownlie : the less serious cases are treated at the Minor Ailments Clinics.

TABLE IV, B.
Treatment of Visual Defect.

Referred for Refraction	Submitted to Refraction.			Number of Children.					
	Under Local Education Authority's Scheme at Clinic.	By Private Practitioner or Hospital.	Otherwise.	Total	For whom Glasses were Prescribed.	For whom Glasses were Provided.	Recom- mended for Treatment other than by Glasses.	Received other Forms of Treatment.	For whom no Treat- ment was considered necessary.
535	194	17	42	253	222	194	12	12	53

TONSILS AND ADENOIDS. At a Conference of representatives of the Education Authority and of the Blackburn and East Lancashire Royal Infirmary held in December, it was arranged that children referred by the Authority to the Infirmary for the operative treatment of adenoids and enlarged tonsils should be dealt with there and a charge of £1/1/0 made for each case, together with 7/6 per night should it be necessary to retain a child in the Institution.

In December, 1920, a definite scheme was put into operation, the essential features of which are :—

1. Children whose parents can afford private treatment are not to be dealt with at the Infirmary.
2. A list is made of those to be recommended for the operation at the cost of the Education Authority, and when a sufficient number of names are on the list it is arranged that they be operated upon at the Infirmary by the Honorary or Assistant Honorary Throat Surgeon on a special morning reserved for this Education Authority's cases.
3. The children are seen at the Town Hall by the Assistant School Medical Officer on the day before the operation in order to make sure that there is no complication, such as acute nasal catarrh, which would interfere with its success. At this visit instructions are given as to the preparation of the child for the operation.
4. The operation is performed under a general anæsthetic and the children remain at the Infirmary until they are fit to be taken home. If necessary, they are retained over-night.
5. Ten days after the operation they are examined at the Town Hall and referred for a course of breathing exercises by Miss Holmes, Organiser of Physical Training. These breathing exercises are an essential part of the treatment, for children become so used to breathing through the mouth before the obstruction at the back of the nose has been removed, that a considerable effort is needed to re-educate the child to breathe through the nose, and unless this is done the growth may recur. The following Table gives particulars of the cases dealt with during 1920 :—

TABLE IV. C.**Treatment of Defects of Nose and Throat.**

Referred for Treatment	Number of Children			Received other forms of Treatment	
	Received Operative Treatment				
	Under Local Education Authority's Scheme or Hospital	By Private Practitioner or Hospital	Total		
190	13	62	75	20	

It will be seen that 95 cases were awaiting treatment at the end of 1920. During the first four months of 1921, 73 children were operated upon on behalf of the Authority at the Royal Infirmary.

DENTAL DEFECTS. No dental treatment was provided by the Education Authority during 1920. There were 1,074 children referred from Routine Medical Inspections for dental treatment, and in 613 the cases were either dealt with by a dentist or the teeth were extracted at a dental surgery.

Early in 1921 a Lady Dentist was appointed. Except for a little dental work for tuberculous patients and for expectant and nursing mothers, her whole time will be devoted to inspection and treatment of the teeth of school children. It is important in any scheme for dealing effectively and systematically with the teeth of school children that the dentist's time should not be taken up by having to treat a large number of "casual" cases who require extractions because of toothache; a School Dental Service means something more than that: its ideal is to *prevent* carious teeth and to keep mouths in a healthy state from infancy up. It would require several whole-time dentists to inspect and treat all the 19,000 school-children in Blackburn, probably less than 20% of whom have healthy mouths. It is necessary, therefore, to leave deliberately the older children to take care of themselves, and to concentrate on the younger scholars whose permanent teeth are beginning to erupt. During 1921 all children born during

1914-15-16 are being examined and treatment offered to those who will accept it. In 1922 those born in 1917 will be examined, and those examined this year will be re-examined, when any further treatment required will be offered. In this way, by making the mouths healthy as the permanent teeth come, by re-inspecting year by year and giving an opportunity for the mouths to be kept healthy, that inestimable boon of a full complement of sound teeth should be within the reach of the rising generation.

TUBERCULOSIS. Notified cases of Tuberculosis in school-children are referred to the Tuberculosis Officer, who treats at the Dispensary those for whom this form of treatment is desirable. There is unfortunately as yet no provision in the Local Sanitary Authority's Scheme for the residential treatment of cases of Tuberculosis in children, but the Blackburn Board of Guardians admits suitable cases to an Open-Air Annexe of their Queen's Park Hospital, where most of the children admitted make remarkable progress.

CRIPPLING DEFECTS AND DEFORMITIES. No treatment was provided by the Education Authority for these cases during 1920, but several children were referred to the Blackburn Cripples' Society and the Blackburn Branch of the National Society for the Prevention of Cruelty to Children who arranged to obtain orthopaedic treatment for them in Manchester.

A Clinic for the treatment of deformities by Swedish Remedial Exercises under the supervision of the Organiser of Physical Training is in process of formation.

SUMMARY. The following Table gives particulars of all cases referred for treatment during 1920 and shows the number actually treated :—

TABLE V.

**Summary of Treatment of Defects as shown in
Table IV (A, B, C, D, and F).**

Disease or Defect.	Referred for Treatment	Number of Children.			TOTAL.
		Under Local Education Authority's Scheme.	Otherwise.	Treated.	
Minor Ailments	1413	157	1059	1216	
Visual Defects	539	194	59	253	
Defects of Nose and Throat ...	190	13	82	95	
Dental Defects	1074	—	613	613	
Other Defects	401	—	294	294	
TOTAL	3617	364	2107	2471	

The 401 children with "other defects" suffered from miscellaneous diseases, such as Bronchitis, Rheumatism, Heart Disease, Nervous Disease, and were referred to their own Doctors or to the Infirmary for treatment: 294 obtained medical advice, but others could not be persuaded to do so. The unsatisfactory feature of the Table is that there were over one thousand children at the end of the year for whom medical or dental treatment had not been provided.

OPEN-AIR EDUCATION.

The first Open-Air Class in Blackburn was started in connection with Bangor Street School in 1912: since then two others have been established, one at Accrington Road School and the other in the Corporation Park.

Provision is made for 72 children, but even so the accommodation is insufficient, and at the end of the year 17 delicate children were awaiting admission. During the year 71 children were discharged from these Classes.

BANGOR STREET CLASS.

No. Discharged.	Average Duration of Attendances.	Average increase in weight.
31	8.7 months.	7 lbs.

ACCRINGTON ROAD CLASS.

No. Discharged.	Average Duration of Attendances.	Average increase in weight.
26	12.9 months.	7 lbs.

CORPORATION PARK CLASS.

No. Discharged.	Average Duration of Attendances.	Average increase in weight.
14	8 months.	5.5 lbs.

The increase in weight as shown by the above figures exceeds the usual average increase of 4 lbs. per annum in the normal child : this fact in itself proves the value of these classes. All the children discharged were improved in general health and physique. All admissions and discharges are made on the recommendation of the School Medical Officer : the children are medically examined by the Assistant School Medical Officer every three months and their heights and weights carefully recorded. It would appear advisable to convert many, if not all our existing schools into Open-Air establishments, for what is suitable for a delicate child would be doubly beneficial to a healthy one.

There is no residential Open-Air School, and no arrangements were made for school journeys or school camps.

PHYSICAL TRAINING.

In accordance with a request of the Board of Education, the following report has been prepared by Miss Holmes, who took up her duties as Organizer of Physical Training on November 8th, 1920 :—

“ The arrangements for Physical Training of the children attending the Public Elementary Schools of Blackburn are as follow :—

“ At the present time three Physical Training Centres are provided, and these are attended by children from Standard I. upwards from seventeen of the schools for one lesson per week,

"This enables better work to be done than is possible at the schools which are handicapped by lack of Central Halls and suitable playgrounds. Approximately one third of the lessons at these Centres are taken by the Specialist Staff, and the remaining lessons by the class teachers in attendance from the schools. The children in general receive two other lessons of 20 minutes each per week at their own schools. An additional Physical Training Centre will be opened in April, 1921, thus affording facilities for work under good conditions for children from other schools. The children of the schools which have Central Halls, or good playground accommodation, receive their physical training lessons at school. Three lessons per week of 20 minutes' duration are in general provided. The Organisers of Physical Training visit the schools periodically to advise the teachers on methods of conducting the lessons. Greater opportunity for specialisation by teachers of proved ability is advisable. In some schools of the Borough folk-dancing has become a useful branch of the Physical Training Scheme. Attention is paid to organised games. Three playing-fields have been used by children attending eight of the Public Elementary Schools, while during the summer months the senior children avail themselves in large numbers of the opportunities provided for swimming instruction at the baths."

PROVISION OF MEALS.

The meals are cooked at the Mayson Street Centre, and are distributed from there to the three Open-Air Classes, the Regent Street Special School, and to the Bent Street Centre, thus making with Mayson Street six centres at which meals can be partaken. Dinners only are supplied and they are provided only on days when the schools are open. The children at the Open-Air classes at the Special School all receive dinner and make a payment towards its cost. Necessitous cases recommended by Head Teachers, School Attendance Officers or the School Medical Officer receive free dinners. Despite the fact that the close of 1920 was a period of industrial depression, the total number of necessitous cases fed during 1920 was only 52.

SCHOOL BATHS.

There is no School in the town (except Regent Street Special School) which has a bath attached for the use of the scholars, though there is a swimming club at each school and the children attend the public swimming baths. As there are so many houses

in the town without a bath or hot water system, it would be a great advantage to both parents and children if arrangements could be made, as is done in many towns, for baths to be available for the regular use of the scholars.

CO-OPERATION OF PARENTS.

A parent is invited to attend each Routine Inspection, and in 27.3% the invitation was accepted. The invitations to the parents are written in the School Medical Officer's Department, sent to the school and distributed by the teachers to the children, who take them to their parents. As 11,500 married women are industrially employed in Blackburn, the response is as good as could be expected.

There were 15 objections to Medical Inspection; 458 parents were interviewed at the Town Hall with regard to the various defects from which their children were suffering.

The co-operation of the parents in securing *treatment* of the defects has been fairly satisfactory. There has been a considerable number of cases in which treatment has not been obtained, but this has to some extent been due to the lack of facilities for the special treatment of physical defects in school children, and this is now being remedied. It is hoped that increased co-operation of the parents will be obtained as a result of the lectures of Dr. Robertson and the efforts of the Publicity Committee on Health to educate the public on the importance of securing early treatment for any defect which may have developed.

CO-OPERATION OF TEACHERS.

It is very gratifying to be able to report the keen interest taken in our work by the teachers; it has been arranged in future to supply them with information as to the defects found at routine inspection and as to the attendances of children at the Clinics. A card is being issued to each child in attendance at a Clinic and on it will appear particulars of the Clinic attended, the time the child left the Clinic, and when the next attendance is necessary: the card will be shown to the teacher, who will be asked to initial it. The teachers are present whenever possible at the Routine Inspections, and when this occurs valuable information regarding the child can be given to the Doctor, and advice as to any special care which may be necessary given to the Teacher. Special cases may be sent by the teachers to the Inspection Clinic which is held at the Town Hall each Tuesday and Friday at 2 p.m.

CO-OPERATION OF SCHOOL ATTENDANCE OFFICERS.

Valuable assistance is given by the School Attendance Department, who follow up at home cases where attendance at the Clinics is unsatisfactory.

Two hundred and eighty-two children were examined at the Inspection Clinics at the request of the School Attendance Department in order to determine their fitness for school :—

Ordinary School	189
Deaf & Dumb School	2
Blind School	1
Regent Street Special School	9
Open-Air Classes	77
Residential School for Mentally Defectives	2
School for Physically Defectives	1
Epileptic Home	1
...	—
...	282

CO-OPERATION WITH VOLUNTARY BODIES.

Every effort is made to utilise the services of voluntary workers. Arrangements have been made for the After-Care Sub-Committee of the Juvenile Employment Committee to follow up at home cases of those children who have left school with physical defects untreated. ...

The assistance rendered by the Crippled Aid Society and the National Society for the Prevention of Cruelty to Children in arranging for cripples to be operated upon has already been mentioned : the former Society has a band of helpers who visit all cripples regularly. The National Society for the Prevention of Cruelty to Children has an Inspector stationed in Blackburn, and any case of persistent refusal to obtain treatment for a defect causing bodily suffering to a child was referred to him. In every case a visit by the Inspector sufficed to induce the parents to obtain the necessary treatment.

BLIND, DEAF, DEFECTIVE AND EPILEPTIC CHILDREN.

For the first time in Blackburn an endeavour has been made to compile a register of children for whom special attention is needed by reason of serious physical or mental defect. The figures are by no means complete and are continually receiving additions. The following is a classified list of these children :—

TABLE III.

Numerical return of all exceptional children in the area in
1920.

			Boys	Girls	Total
BLIND. (including partially blind), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending Public Elementary Schools, ... Attending Certified Schools for the Blind, ... Not at School, ...	10 2 1	12 3 ...	22 5 1
DEAF and DUMB. (including partially deaf), within the meaning of the Elementary Education (Blind and Deaf Children) Act, 1893.		Attending Public Elementary Schools, ... Attending Certified Schools for the Deaf, ... Not at School, ...	...	...	...
Mentally Deficient	Feeble Minded	Attending Public Elementary Schools, ... Attending Certified Schools for Mentally Defective Children, ... Notified to the Local Control Authority by Local Education Authority during the year ... Not at School	6 31	4 22	10 53
	Imbeciles	At School Not at School	...	11 2	...
	Idiots	...	...	...	...
Epileptics		Attending Public Elementary Schools ... Attending Certified Schools for Epileptics ... In Institutions other than Certified Schools ... Not at School ...	3 1	... ... ... 2	3 3
Physically Defective	Pulmonary Tuberculosis	Attending Public Elementary Schools ... Attending Certified Schools for Physically Defective Children ... In Institutions other than Certified Schools ... Not at School ...	11 2	17 3	28 5

Table III. (contd.)

			Boys	Girls	Total
	Crippling due to Tuberculosis	Attending Public Elementary Schools ... Attending Certified Schools for Physically Defective Children ... In Institutions other than Certified Schools... Not at School ...	32 ... 5 3	19 ... 1 3	51 ... 6 6
Physically Defective	Crippling due to causes other than Tuberculosis i.e. Paralysis Rickets, Traumatism.	Attending Public Elementary Schools ... Attending Certified Schools for Physically Defective Children ... In Institutions other than Certified Schools... Not at School ...	73 12	53 14	126 26
	Other Physical Defectives e.g. delicate and other children suitable for admission to Open-air Schools: children suffering from severe heart disease	Attending Public Elementary Schoo's ... Attending Open-Air Schools ... Attending Certified Schools for Physically Defective Children other than Open-Air Schools Not at School ...	9 39 ... 6	7 34 ... 4	16 73 ... 10
Dull or Backward	Retarded 2 years " 3 "	}		28	22
					50

BLIND CHILDREN. The 22 children attending Public Elementary Schools who are mentioned in the Table are partially blind: most of them are suffering from High Myopia. Special provision is necessary for the education of these children as the curriculum of an ordinary school makes their vision worse.

MENTALLY DEFECTIVE CHILDREN. Application has now been made for the approval of the Board of Education to the adoption in Blackburn of the model arrangements under the Elementary Education (Defective and Epileptic Children Act, 1899, and the Mental Deficiency Act, 1913.

When this is obtained, notifications of idiots and imbeciles and of feeble-minded children discharged from the Regent Street Special School will be made to the Lancashire Asylums Board, the Local Authority under the Mental Deficiency Act. Considerable assistance in the care of these cases has been given to us by Miss Gibson, Secretary of the Central Lancashire Branch of the National Association for the Care of the Feeble-Minded.

The children attending the Regent Street Special School are being carefully classified as to their mental ability and admission is being strictly limited to the feeble-minded. The school can accommodate 80 children : at the beginning of 1920 there were 38 children on the school roll, and at the end of the year 52. The following Table gives particulars of the present condition of the 135 children discharged from the Regent Street School since 1910 :—

ANNUAL RETURN OF THE AFTER-CAREERS OF CHILDREN FORMERLY ATTENDING SPECIAL SCHOOLS.

	School:		
	<i>Regent Street Special School.</i>	Boys.	Girls.
1. No. of children who have left the School since 1910 or since the date of Certification	96	39	
2. No. who			
(a) Have since died	7	1	
(b) Are known to be incapable by reason of mental defect of undertaking employment.	3	5	
(c) In attendance at an Institution for further education..	—	—	
(d) Are in other Institutions (two in Poor-Law Institution, one each in Naval Home and Industrial School)	4	0	
3. No employed in			
(a) Industrial or manual occupations	54	17	
(b) Agricultural or Rural Occupations	4	—	

*School:**Regent Street Special School.*

Boys. Girls.

(c) Domestic occupations (including those who are helping in domestic work at home)	10	11
(d) Commercial, professional or clerical work	—	—
(e) "Blind Alley" or precarious occupations	3	—
4. No. who have left the neighbourhood or whose after-careers have not been traced	11	5

Note.—In most instances the actual earnings are not known, but five boys earn between £1 and £2 per week and two boys earn over £3 per week. Four girls earn over £1 per week and two girls earn over £2 per week.

DULL AND BACKWARD CHILDREN. Exact information is unavailable as to the number of children retarded two or three years as judged by age and standard: the 50 cases included under this heading in Table III., page 43, are children noted to be dull and backward by the Assistant School Medical Officer in the course of his routine or special examinations in the schools.

NURSERY SCHOOLS.

There is no Nursery School in Blackburn.

SECONDARY SCHOOLS.

There is no provided Secondary School in the town. Secondary education, however, is available for 414 boys at the Queen Elizabeth Grammar School, and for 595 girls at the High School: this number includes the girls in the Preparatory Department at Cross-hill. At the Parish Higher Grade and Blakey Moor Higher Elementary Schools pupils are retained up to the age of 16 years.

At the request of the Governors of the Grammar School and of the High School, medical inspection of their scholars was commenced early in 1921. Up to now only the ordinary routine inspection at the age of 12 years has taken place at the Parish Higher Grade and at the Blakey Moor Schools, but in future the

examinations will take place as for Secondary Schools, namely, at the ages of 12 and 15 years. On leaving, there will be a full examination and there will be intermediate examinations as required.

EMPLOYMENT OF CHILDREN AND YOUNG PERSONS.

During 1920 there were a large number of half-timers, but since 1st January, 1921, no new exemption for half-time could be granted. The number of total exemptions from school attendance granted during 1920 was 1,630 : 660 secured exemption to become weavers, 165 spinners, etc., 105 warehouse workers, 98 shop assistants, 84 machinists, 82 reachers, 69 winders, and 50 clerical workers. There were 1,511 grants of partial exemption, including 1,086 to become weavers, 122 spinners, etc., 110 reachers, and 68 warehouse workers. In September, 1920, byelaws were made under the Employment of Children Act, 1903, and the Education Act, 1918, with respect to the employment of children and to street trading by persons under the age of 16 years. Certain employments such as those of lather boy, billiard marker, and programme boy or girl are entirely prohibited for children under 14 years of age. The Education Act, 1918, prohibits any employment of children under 12 years of age, and the byelaws prohibit the employment before school of any child between 12 and 14 years, unless the School Medical Officer gives a certificate to the effect that the employment will not be prejudicial to the child's health. Even with the certificate the hours of employment on days when the school is open are limited to the hours of 7 a.m. to 8 a.m. and 5 to 6 p.m. All children engaged in the sale or delivery of milk or newspapers must have efficient waterproof footwear and a garment sufficiently waterproof to protect the child from injury to health by inclement weather. During 1920, 14 children were examined as to fitness for employment, and in no case was the employment proposed considered likely to be inimical to health.

Juveniles employed at the local theatres are examined at the request of the Juvenile Employment Officer, and in every case lodgings are inspected.

The School Medical Officer works in collaboration with the Juvenile Employment Officer, who endeavours to find suitable occupations for children leaving school. Difficulty has been experienced in giving satisfactory information on the Juvenile

Employment Cards as to the physical condition of the children about to leave school. The present requirement of the Board of Education is that children who are aged 12 years should be examined as "leavers," but it is now always more than 12 months and may be two years before they leave school, and many important changes in a child's health may occur in the meanwhile. It appears that age 13 would be a more suitable age than 12 for the last routine inspection, and the information supplied by the School Medical Officer to the Juvenile Employment Officer would then be much more useful than it is at present. In the meantime, the teachers are being asked to refer for special examination any child about to leave school who appears in any way to be ailing.

MISCELLANEOUS.

EXAMINATIONS OF SCHOLARSHIP WINNERS.

Bursary Scholarships	22
Governors' Scholarships to the Girls' High School	17
Leyland Foundation Scholarships	5
Robert Carr Radcliffe Scholarship	1
Eli Heyworth Scholarship	1
	—
Total	46
	—

Three children were examined before admission to Industrial Schools.

